



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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In re the application of:

DIETER MAUER ET.AL.

Serial No.: 09/187,358

Filed: November 6, 1998

For: CONVEYOR FOR ELONGATE
COMPONENTS DESIGNED WITH A
HEAD AND A SHANK

)
)
) Art Unit: 3652

) Examiner: Thomas J. Brahan

) Docket No. GER-5196
)
)

BRIEF ON APPEAL

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This is an appeal to the Board of Patent Appeals and Interferences from the decision of the Examiner, dated June 5, 2002, finally rejecting claims 1, 2 and 7 through 15 of this application. A timely Notice of Appeal was filed on December 4, 2002.

It is noted that the non-extended two-months due date for the filing of this Brief was February 4, 2003. A petition to extend the time for filing the Brief by five months to July 7, 2003, is being filed herewith. July 4, 2003, was on a Friday, and was a Federal holiday. The next succeeding day which is not a Saturday, Sunday, or a Federal holiday, is July 7, 2003, which is the day to which the extended period for response is being requested.

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I. REAL PARTY IN INTEREST

The real party in interest in this application is NEWFREY LLC. The entire right, title and interest in and to the invention covered in this application is assigned to NEWFREY LLC which is a subsidiary company of THE BLACK & DECKER CORPORATION, whose addresses are noted below. The Assignment to NEWFREY LLC is recorded in the Assignment Records of the U.S. Patent and Trademark Office at Reel/Frame: 013516/0753.

The addresses are:

NEWFREY LLC	THE BLACK & DECKER CORPORATION
Drummond Plaza Office Park	701 East Joppa Road - TW199
1423 Kirkwood Highway	Towson, Maryland 21286
Newark, Delaware 19711	

II. RELATED APPEALS AND INTERFERENCES

There are no appeals or interferences known to the appellants, the appellants' legal representative, or the assignee which, in appellants' opinion, will directly affect or be directly affected by or have a bearing on the Board's decision in this pending appeal.

III. STATUS OF CLAIMS

Claims 1, 2 and 7 through 15 are pending and under consideration in this application, and are the appealed claims. There are no other pending claims in this application.

IV. STATUS OF AMENDMENTS

There were no amendments by appellants in response to the final rejection of June 5, 2002, which have been entered into the record. By pre-arrangement with the Examiner's supervisor, appellants faxed a proposed amendment to the Examiner on July 2, 2003, which was subsequent to the filing of the Notice of Appeal. On July 3, 2003, the Examiner notified appellant's representative,

J. Bruce Hoofnagle, that the proposed amendment did not place the

application in condition for allowance. Consequently, the proposed amendment was not entered into the record for any purpose.

V. SUMMARY OF THE INVENTION

As shown in Fig. 7, and described on page 11, lines 21 and 22, an elongate component 12 has a head 41 and a shank 42. As shown in Fig. 1, and described on page 7, lines 31 and 32, a conveyor, for feeding the elongate components 12, includes a feed arrangement 7 having a transfer arrangement 8.

As shown in Figs. 2 and 4, and as described on page 8, lines 5 through 12, the components 12 are fed to the conveyor by way of a feed conduit 3, which includes a feed duct 11 formed with a head guiding duct 13 and a shank guiding duct 14. The transfer arrangement 8 is formed with a transfer region 15 into which the elongate component 12 is fed from the feed duct 11 and from which the component passes into the conveying duct 16. One of the elongate components 12 is shown in the transfer region 15, in each of Figs. 2 and 4. As further illustrated in Figs 2 and 4, the transfer region 15 is fully aligned with the conveying duct 16 in an upper portion thereof.

As shown in Fig. 4, and as described on page 11, lines 1 through 11, in the embodiment of the invention covered in the rejected claims, a catch element 18 is mounted for pivotal movement about an axis 38. A spring or biasing element 39, which is a compression spring, is located partially within a bore formed in a connecting member 4. The spring element 39 engages the catch element 18 between the axis 38 and an end portion 21 of the catch element to bias, or urge, the catch element 18 in a counterclockwise direction, as viewed in Fig. 4. As a result of the biasing action of the spring element 39, the end portion 21 of the catch element extends into the head guiding duct 13, and thereby into a feed path for the head 41 of the elongate component 12, as the component is being fed to the transfer region 15.

Referring further to Fig. 4, and as described on page 11,

lines 9 through 16, as the head 41 of the component 12 is moved through the feed path, the head engages and pivots the catch element 18, and the end portion 21 thereof, in a clockwise direction, as viewed in Fig. 4, against the biasing action of the spring element 39, and out of the head guiding duct 13. The component 12 continues to move through the feed duct 11, and then passes from the feed duct into the transfer region 15 at an upper end of the conveying duct 16. After the component 12 moves past the catch element 18, the end portion 21 of the catch element re-enters the head guiding duct 13, under the biasing action of the spring element 39, to the position illustrated in Fig. 4.

A locking face 22 of the catch element 18 limits, or blocks, a portion of the transfer region 15 which is adjacent the head guiding duct 13. This partial limiting of the transfer region 15 precludes bounce back, or return movement, of the head 41 from the transfer region into the head guiding duct 13, and thereby precludes such return movement of the component 12 into the feed duct 11.

In appellants' response, filed by certificate of mailing on November 8, 2000, in response to an Office action dated June 21, 2000, appellants amended the specification at page 11, line 1 and also following line 5, and proposed an amendment to Fig. 4. While the Examiner approved the amendment to Fig. 4, the Examiner did not indicate approval, or disapproval, of the amendments to the specification. Since the amendments to the specification were related to the amendments to Fig. 4, appellants assumed that the Examiner approved the changes to the specification.

In essence, the above-noted amendments to page 11 and Fig. 4, referred to a stop surface 49 formed on the connecting member 4, which is located to engage a second end portion 48 of the catch element 18, opposite the first end portion 21, to limit the distance in which the first end portion is urged into the head guiding duct 13.

Referring to Figs. 1, 3, 5 and 6, and as described on page 7,

lines 31 through 34, and page 9, lines 13 through 28, the transfer arrangement 8 includes two positioning segments 9, 10 provided in the transfer region 15, which form a continuation of the feed duct 11. The positioning segments 9, 10 form a recess 24 through which the component 12 can be introduced into the conveying duct 16. Each positioning segment 9, 10 is pivotal around a respective pivot axis 25, 26, against a spring force of a respective spring 28, 27.

Referring to Figs. 2 through 6, and as described on page 10, lines 1 through 22, the conveying duct 16 is formed by a split sleeve 31 having a first end portion 34 adjacent the transfer region 15, and a second end portion 35 remote from the transfer region. Resilient elements 36 are placed in grooves 37 in the split sleeve 31 at the second end portion 35. The cross section of the conveying duct 16 tapers conically from the first end portion 34 to the second end portion 35 and is enlargeable against the action of the resilient elements 36, as the component 12 passes therethrough.

VI. ISSUES

Issue 1: Whether claims 1, 2, 7, 8, 9, 12, 13 and 15 are anticipated, under 35 U.S.C. § 102(b), by U.S. Patent No. 5,579,975 (hereinafter "the Moorman patent").

Issue 2: Whether claims 1, 2, 7 and 8 are anticipated, under 35 U.S.C. § 102(e), by U.S. Patent No. 5,897,045 (hereinafter "the Olvera patent").

Issue 3: Whether claims 1, 2 and 7 through 14 are unpatentable, under 35 U.S.C. § 103(a), over U.S. Patent No. 5,813,114 (hereinafter "the Blacket patent").

Issue 4: Whether claims 1, 2, 7 and 8 are unpatentable, under

35 U.S.C. § 103(a), over U.S. Patent No. 5,192,012 (hereinafter "the Schafer patent").

Issue 5: Whether claim 14 is unpatentable, under 35 U.S.C. § 103(a), over the Olvera patent in view of U.S. Patent No. 5,810,239 (hereinafter "the Stich patent").

Issue 6: Whether claim 14 is unpatentable, under 35 U.S.C. § 103(a), over the Schafer patent in view of the Stich patent.

VII. GROUPING OF CLAIMS

For each ground of rejection which appellants contest herein which applies to more than one claim, such additional claims, to the extent separately identified and argued below, do not stand or fall together.

VIII. ARGUMENTS

Issue 1: Whether claims 1, 2, 7, 8, 9, 12, 13 and 15 are anticipated, under 35 U.S.C. § 102(b), by U.S. Patent No. 5,579,975 (hereinafter "the Moorman patent").

Appellants' claims under this Issue 1 have been rejected under 35 U.S.C. § 102(b) as being anticipated by the Moorman patent.

Appellants set forth in claim 1, which is the only independent claim in this application, a conveyor for feeding elongate components 12, which have a head 41 and a shank 42. A transfer arrangement 8 of the conveyor includes a transfer region 15 into which the components 12 are fed from a feed duct 11. The feed duct 11 is formed with a head guiding duct 13, having a feed path for the heads 41, and a shank guiding duct 14, which are in communication with a conveying duct 16. The components 12 are fed from the feed duct 11 into the transfer region 15, and can be moved from the transfer region into the conveyor duct 16.

As further set forth in appellants' claim 1, at least one

catch element 18 is located externally of the transfer region 15, and extends along the head guiding duct 13 in a prescribed direction of feeding the components 12. At least one portion 21 of the at least one catch element 18 is removably extendable into and out of the feed path of the head guiding duct 13. A biasing element 39 is positioned to urge the at least one portion 21 into the feed path of the head guiding duct 13 for engagement with the components 12 passing therethrough.

The at least one catch element 18 and the at least one portion 21 thereof are mounted for deflected movement out of the feed path of the head guiding duct 13 against the normal urging of the biasing element 39 upon engagement with the components 12 being fed through the feed path to allow continued feeding of the components through the feed path.

Therefore, as set forth in appellants' claim 1, and the claims which depend therefrom, the at least one catch element 18, and thereby the at least one portion 21, are located externally of the transfer region 15. Further, the at least one catch element 18, and thereby the at least one portion 21, is normally removably urged into the feed path of the head guiding duct 13 by the biasing element 39, and is movable from the feed path upon engagement with the components 12 passing through the feed path.

The Moorman patent shows a nailing tool in which a cartridge of nails 26 are linked together by a pair of tape strips 27 and 28. The linked nails 26 are mounted in an inner magazine portion 19 which is pivoted for movement about a pin 31, at a rearward portion of the tool, relative to an outer magazine portion 18. As shown in Fig. 6, the pointed end of the lead nail 26a extends below the trailing nails, and is locatable in a hole 64 of a first workpiece 65 and into engagement with a surface of a second workpiece 66. At the same time, the pointed end of the second nail 26 is in engagement with an outer, or upper, surface of the first workpiece 65.

In order to drive the lead nail 26a into the second workpiece

66, the tool is pressed toward the workpiece, whereby the first several trailing nails 26 engage the upper surface of the workpiece 65, and are pushed upward. At this time, the top surface of the head of the second, or first trailing, nail 26 engages, for the first time, the lower nose of a pawl 59, which facilitates the raising of the inner magazine portion 19 to accommodate the upward shift of the cartridge of nails.

As shown particularly in Fig. 7, the pawl 59 is mounted on a pivot pin 60, and is urged in a clockwise direction by a flat spring plate 61. However, the underside of an upper wing of the pawl 59 is in engagement with an upper shoulder of a block 52, which precludes the pawl from being pivoted in a clockwise direction notwithstanding the presence of the spring plate 61.

In the text of the specification at column 7, lines 66 and 67, and continuing through to line 6 of column 8, it is stated,

"The spring plate 61 normally maintains the pawl 59 in position shown in FIGS. 1, 2, 6, 7 and 8. In this position, the nose of the pawl engages the head of the second nail 26 of the row. This assures that when the tool is pressed toward the workpiece, the nails engaging the workpiece will move upwardly in the guide body drive track 5a and, through the action of the pawl, the inner magazine 19 will move upwardly with the nails, to its second position."

A close examination of Fig. 7 shows that the underside of the nose of the pawl 59 is spaced above the upper surface of the head of the second nail 26 and, is maintained in this position according to the above quoted passage. In order for the tool to function in the manner described in the specification of the Moorman patent, the meaning of the second sentence of the quoted passage is that, with the pawl 59 in the maintained position (i.e., as shown in Fig. 7), **and when the second nail 26 is raised**, the nose of the pawl engages the upper surface of the head of the second nail to assure that "the inner magazine 19 will move upward with the nails, to its second position."

The second sentence does not mean that the head of the second

nail 26 engages the pawl 59 when the second nail is being fed down the track toward the nail-insertion position.

Assume for discussion purposes that the nose of the pawl 59 was in position to engage the head of the second nail 26 as the nail was being fed down the track. The pawl 59 would have to pivot, or be deflected, in a clockwise direction to allow the nail to eventually pass to the insertion position. As noted above, and as clearly shown in the above-noted figures, the pawl cannot be pivoted any further in the clockwise direction because of the abutting surfaces of the pawl 59 and the shoulder of the block 52. Therefore, contrary to the Examiner's interpretation (see item 10 on page 6 of the Office action dated June 5, 2002) of the above-quoted passage, the pawl 59 cannot be in the path of the nail heads. Otherwise, the nails could not, at any time, be moved past the pawl 59 for the reasons explained above.

As set forth in appellants' claim 1, the biasing element 39 urges the at least one portion 21 of the at least one catch element 18 into the feed path, and the at least one catch element is mounted for deflected movement out of the feed path. Clearly, the structure of the Moorman patent does not permit such engagement and deflection.

For the foregoing reasons, appellants submit that claim 1, and dependent claims 2, 7, 8, 9, 12, 13 and 15, patentably distinguish over any teaching of the Moorman patent, and are therefore allowable over the Moorman patent.

Appellants set forth further in claim 2 that a locking face 22 of the at least one catch element 18 prevents any elongate component 12 from slipping from the transfer region 15, i.e., bouncing back or returning to the feed duct 11. There is no hint in the Moorman patent that the pawl 59 prevents the lead nail 26 from slipping from the insertion position. The purpose of the pawl 59 is as described above in the quoted passage. Therefore, appellants' claim 2 distinguishes further over any teaching of the Moorman patent.

Appellants set forth in claim 7 that the at least one catch

element 18 is acted upon by the biasing element 39 to move the catch element from the feed path upon engagement with the elongate components 12 passing through the feed path. Again, the Moorman patent does not teach any structure which is biased to move from the feed path upon engagement with the nails 26 passing through the feed track. Therefore, appellants' claim 7 distinguishes further over any teaching of the Moorman patent.

Appellants set forth in claim 8 that the compression spring 39 is arranged to engage the at least one catch element 18 between the axis 38 and the first end (the at least one end 21). The Moorman patent teaches a spring 61 which engages the pawl 59 between the pivot pin 60 and an end of the pawl, which clearly does not extend into and out of the feed path in the manner of appellants' first end 21. Therefore, appellants' claim 8 distinguishes further over any teaching of the Moorman patent.

Appellants set forth in claim 9, two relatively displaceable positioning segments 9, 10, which define a recess 24 through which the component 12 can be introduced into the prescribed location of the conveying duct 16. The path of the structure of the Moorman patent which facilitates the locating of the lead nail 26a for insertion into the workpiece is the guide body 5 which defines the drive track 5a. The safety trip 6 is outside of the upper portion of the body 5, and well above the location within the body where the nail 26a is located for insertion into the workpiece. In fact, the safety trip 6 plays no part in defining a recess through which the nail travels to the insertion location. Therefore, appellants' claim 9 distinguishes further over any teaching of the Moorman patent.

Appellants set forth in claim 12 that the positioning segments 9, 10 have a form substantially corresponding to the cross section of the feed duct 1. In the Moorman patent, as noted above with respect to claim 9, the safety trip 6 is outside of the body 5, and above the location of the nail 26a, the safety trip in combination with the body cannot provide a form which corresponds to the cross section of the feed track. Therefore, appellants'

claim 12 distinguishes further over any teaching of the Moorman patent.

Appellants set forth in claim 13 that the positioning segments 9, 10 form a continuation of the feed duct 11. In the Moorman patent, as noted above, the safety trip 6 does not form any part of feed track, and does not cooperate with the body 5 in any way to facilitate a feed path for the lead nail 26a. Therefore, appellants' claim 13 distinguishes further over any teaching of the Moorman patent.

Appellants sets forth in claim 15 a second end portion 48 of the at least one catch element 18, a stop surface 49 and the biasing element 39 which normally urges the second end portion into engagement with the stop surface to limit the distance the first end portion 21 is urged into the feed path of the head guiding duct. As noted above, the Moorman patent does not teach any structure which urges an end portion of the pawl 59 into the feed path of the nails 26 and, therefore, cannot teach structure which limits the distance an end portion can extend into the feed path. Therefore, appellants' claim 15 distinguishes further over any teaching of the Moorman patent.

In summary, with respect to the above-noted rejection of claims based on the Moorman patent, the Court of Appeals for the Federal Circuit in *W.L. Gore & Associates v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303, stated that "anticipation requires the disclosure in a single reference of each element of the claim under consideration." As further stated by the Court of Appeals for the Federal Circuit in *Lindemann Maschinenfabrik GbmH v. American Hoist & Derrick Co.*, at 730 F.2d 1452, 221 USPQ 481, "anticipation requires the presence in a single reference disclosure of each and every element of the claimed invention, arranged as in the claim."

Appellants submit that the Examiner has not followed the

above-noted direction of the Court of Appeals for the Federal Circuit in the rejection of claims 1, 2, 7, 8, 9, 12, 13 and 15, as being anticipated by the Moorman patent, and hereby requests the withdrawal of the rejection based thereon and the allowance of these claims.

Issue 2: Whether claims 1, 2, 7 and 8 are anticipated, under 35 U.S.C. § 102(e), by U.S. Patent No. 5,897,045 (hereinafter "the Olvera patent").

As provided under 37 C.F.R. § 1.131, when any claim of an application is rejected, the inventor of the subject matter of the rejected claim may submit a declaration to establish invention of the subject matter of the rejected claim prior to the effective date of the reference on which the rejection is based. Section 1.131 provides further that the effective date of a U.S. patent is the earlier of its publication date or date that it is effective as a reference under 35 U.S.C. § 102(e). Further, prior invention may not be established under §1.131 before January 1, 1996, in a WTO member country.

Attached hereto is a Declaration under 37 C.F.R. § 1.131 submitted by the appellants of this application. As provided in the Declaration, appellants did establish invention of the subject matter of appellants' rejected claims, including claims 1, 2, 7, 8 and 14 of this application, prior to September 12, 1997, which, under the provisions of 37 C.F.R. § 1.131, is the effective date of the Olvera patent. The establishment of the invention occurred in the WTO member country of Germany, subsequent to January 1, 1996.

Appellants submit the above-noted Declaration in support of the completion of their invention prior to September 12, 1997, and request that rejections of appellants' claims based on the Olvera patent be withdrawn.

Issue 3: Whether claims 1, 2 and 7 through 14 are

unpatentable, under 35 U.S.C. § 103(a), over U.S. Patent No. 5,813,114 (hereinafter "the Blacket patent").

All reference below to the "MPEP" refers to the Manual of Patent Examining Procedure, Original Eighth Edition, Revision 1, February 2003.

As noted in MPEP §2143, there are three basic criteria which must be met to support prima facie obviousness. First, there **must** be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there **must** be a reasonable expectation of success and, third, the prior art reference (or references when combined) **must** teach or suggest **all** of the limitations of appellant's claims.

It is further noted in MPEP §2143, that (1) the teaching or suggestion to make the claimed combination and (2) the reasonable expectation of success **must both** be found in the prior art, **not** in appellants' disclosure.

Also, as noted in MPEP §2142 (page 2100-108, middle paragraph of left column):

"To reach a proper determination under 35 U.S.C. 103, the examiner must step backward in time and into the shoes worn by the hypothetical "person of ordinary skill in the art" when the invention was unknown and just before it was made. In view of all factual information, the examiner must then make a determination whether the claimed invention "**as a whole**" would have been obvious at the time to that person. Knowledge of applicant's disclosure **must** be put aside in reaching this determination yet kept in mind in order to determine the "differences," conduct the search and evaluate the "subject matter as a whole" of the invention. The tendency to resort to "hindsight" based upon applicant's disclosure is often difficult to avoid due to the very nature of the examination process. However, impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the **facts gleaned** from the prior art." (Emphasis added)

It is further noted in MPEP §2143, that to establish a prima facie case of obviousness (1) the teaching or suggestion to make the claimed combination and (2) the reasonable expectation of success **must both** be found in the prior art , **not** in appellant's disclosure.

Appellants set forth in amended claim 1 that elongate components 12 having a head 41 and a shank 42 are fed through a feed duct 11, with the heads being moved through a feed path of a head guiding duct 13 of the feed duct. The components 12 are fed from the feed duct 11 into a transfer region 15. The at least one catch element 18 is located externally of the transfer region 15. At least one portion 21 of the at least one catch element 18 is removably extendable into and out of the feed path of the head guiding duct 13. A biasing element 39 normally urges the at least one portion 21 into the feed path of the head guiding duct 13. The at least one catch element 18 and the at least one portion 21 are mounted for deflected movement out of the feed path of the head guiding duct 13 against the normal urging of the biasing element 39 upon engagement with each component 12.

While a plunger 23 of the conveyor, as described in appellants' specification at page 9, lines 1 through 8, and as shown in Fig. 4, is not an element of appellants' claim 1, the feeding structure as set forth in appellants' claim 1 is designed to place the component 12 at the transfer region 15 for eventual movement from the transfer region into the conveying duct 16. In the placement of the elements of the feeding structure in appellants' claim 1, the at least one catch element 18, and the at least one portion 21 thereof, are mounted externally of the transfer region 15 to prevent any impediment to the movement of the component 12 from the transfer region into the conveying duct 16.

The Blacket patent shows, in Fig. 8 thereof, an inclined supply passage 220 for guiding rivets 217, which are being blown by feed pressure through the supply passage and, with continuous movement, into an upper portion of a delivery passage 212. A

plurality of pins or balls 260 are located within the delivery passage 212, and clearly define the vertical side-wall bounds of the delivery passage. An intermediate/lower portion of a leaf spring 229 is fixedly mounted. An upper end of the leaf spring 229 extends normally into the delivery passage 212.

As a head of the rivet 217 passes from the supply passage 220 and into the delivery passage 212, the upper end of the leaf spring 229 is deflected farther into the delivery passage. This allows the rivet 217 to be continuously moved under the feed pressure through the supply passage 220 and upward in the delivery passage 212. It is noted that the pins or balls 260 are also located in the delivery passage 212, including the area occupied by the upper end of the leaf spring 229.

The above description is supported by the specification of the Blacket patent at column 5, lines 1 through 6, which reads as follows:

"To prevent the rivets 217 from re-entering the supply passage 220 under gravity, a leaf spring 229 extends into the supply passage 220 **and the delivery passage 212**, the leaf spring 229 and the pins or balls 260 being deflected to one side as the rivet is blown from the supply passage into fastener delivery passage 212."
(Emphasis added)

From the above quoted passage, and from Fig. 8, of the Blacket patent, it is clear that the upper end of the leaf spring 229 normally extends into the delivery passage, and is moved farther into the delivery passage as the rivet 217 passes from the supply passage into the delivery passage. Further, when the punch 216 is moved upward to push the rivet 217 from the delivery passage 212, the punch will engage the upper end of the leaf spring 229, as viewed in Fig. 8.

In this context, the Blacket patent teaches away from the invention set forth in appellants' claim 1, wherein the catch element is external of the transfer region 15.

The purpose of the leaf spring 229 of the Blacket patent is to prevent the re-entry, **by gravity**, of the rivet 217 into the supply passage 220, for example, upon the loss of feed pressure necessary to sustain the rivet in the upper position in the delivery passage 212 shown in Fig. 8. Therefore, in order for the structure of the Blacket patent to function in the intended manner, the upper end of the leaf spring 229 must be located in, **and not external of**, the delivery passage 212 to retain the rivet at the juncture of the supply passage 220 and the delivery passage 212 upon the loss of feed pressure. Also, because of the normal location of the upper end of the leaf spring 229, the upper end is moved farther into, and not externally of, the delivery passage 212 as the rivet 217 passes into the delivery passage.

As set forth in appellants' claim 1, the catch element 18 is external of the transfer region 15. In the Blacket patent, if the upper end of the leaf spring 229 is placed externally of the delivery passage 212, and is positioned to extend only into the supply passage 220, the structure of the Blacket patent could no longer function in the intended manner.

Therefore, appellants submit that the Blacket patent does not suggest to, or motivate, anyone to modify the structure of the Blacket patent.

If the upper end of the leaf spring 229 is not maintained in the delivery passage 212, upon the loss of feed pressure, the rivet will fall by gravity to a location at the top of the punch 216. When feed pressure is returned, it would be extremely difficult, if not impossible, to direct the pressure in a direction that would urge the rivet 217 to the top of the delivery passage 212. Yet, in order to include the feature of the leaf spring 229 being external of the delivery passage 212, in the manner set forth in appellants' claim 1, the spring element of the Blacket patent would not extend into the delivery passage, and the leaf spring feature could not function as intended.

As set forth in appellants' claim 1, the at least one catch element 18, including the at least one portion 21, is located externally of the transfer region 15. As described in the above-quoted passage of the Blacket patent, the upper exposed end of the leaf spring is in the supply passage 220 **and in the delivery passage 212**, and is not at any time "externally of" the delivery passage. With the structure and functioning taught in the Blacket patent, there is no suggestion or motivation in the Blacket patent to modify such structure or functioning to perform in the manner set forth appellants' claim 1. Nor is there any reasonable expectation of success with such modification. Further, the Blacket patent does not teach or suggest all of the limitations set forth in appellants' claim 1.

Further, as set forth in appellants' claim 1, the components are fed from the feed duct 11 into the transfer region 15, from which the components are moved into the conveying duct 16. The rivet 217 in the Blacket patent is blown from supply passage 220 directly into the delivery passage 212, and well into the delivery passage in a continued movement of the rivet.

With respect to the first criterion of the three basic criteria set forth in the above-quoted MPEP §2143, appellants have set forth above various reasons in support of the lack of any suggestion or motivation in the Blacket patent to modify the teaching of the patent.

With respect to the second criterion of the three basic criteria, appellants also have set forth reasons above for the lack of any reasonable success in the structure of the Blacket patent as modified by the Examiner.

With respect to the third criterion of the three basic criteria, the Blacket patent does not teach or suggest **all** of the features of appellants' claim 1, and the claims which depend therefrom.

As noted above, MPEP §2143 requires that the (1) teaching or suggestion to make the claimed combination and (2) the reasonable expectation of success must both be found in the prior art, not in appellants' disclosure. Appellants submit that, for the reasons expressed above, the teachings or suggestions of the Blacket patent do not make the claimed combination set forth in appellants' rejected claim 1.

Appellants submit that the Examiner has used the invention of appellants' rejected claims as the key teaching in an attempt to show that the claimed invention is obvious. Appellants submit further that the Examiner has resorted to construction by hindsight which, as noted in the above passage from MPEP §2142, is not permissible in support of a rejection under 35 U.S.C. § 103(a).

For the foregoing reasons, appellants submit that claim 1, and dependent claims 2 and 7 through 14 are allowable over any teaching or suggestion of the Blacket patent, and hereby request (1) reversal of the Examiner's rejection of these claims, and (2) allowance of these claims.

Claims 2 and 7 through 14 set forth structure not suggested by the Blacket patent. For example, in claim 2, the at least one catch element (18) includes a locking face (22). In claims 7, the at least one catch element (18) is movable around an axis (38). In claim 8, the biasing element (39) is a compression spring. In claim 9, the conveyor includes biased positioning segments (9, 10). In claim 10, the conveyor includes biasing elements (27,28) for urging together, and allowing displacement of, the positioning segments (9,10). In claim 11, each positioning segment (9,10) is pivotable about a respective axis. In claim 12, the positioning segments (9, 10) have a form corresponding to the cross section of the feed duct (11). In claim 13, the positioning segments (9,10) form a continuation of the feed duct. In claim 14, the conveying duct (16) is formed by a split sleeve (31).

For the foregoing reasons, claims 2 and 7 through 14 further distinguish over any suggestion of the Blacket patent, and reversal of the Examiner's rejection, and allowance, of these claims is hereby requested.

Issue 4: Whether claims 1, 2, 7 and 8 are unpatentable, under 35 U.S.C. § 103(a), over U.S. Patent No. 5,192,012 (hereinafter "the Schafer patent").

The various requirements of the sections of the MPEP, set forth under Issue 3 above, apply equally to the rejections under Issue 4, but are not repeated here.

As set forth in appellants' amended claim 1, at least one portion (21) of an at least one catch element (18) is removably extendable into and out of a feed path of a head guiding duct (13). The at least one catch element (18) and the at least one portion (21) are mounted for deflected movement out of the feed path of the head guiding duct (13) against the normal urging of a biasing element (39) upon engagement with **each** elongate component (12) being fed through the feed path.

The Schafer patent shows a spring member 8 which has an end portion extending into the feed path of a head 12 of a nail 10. As each of a plurality of the nails 10 are fed through the feed path, the lead nail engages the end portion of the spring member 8, which **precludes** continued advancement of the plurality of nails. Apparently, in order to advance the lead nail 10 past the end portion of the spring member 8, a force must be applied to the trailing end of the plurality of nails. After the lead nail has advanced past the end portion of the spring member 8, the second nail of the plurality is precluded from advancing as described above.

The Schafer patent does not suggest deflection of the end portion of the spring member 8 upon the engagement thereof with each advancing nail 10.

For the foregoing reasons, appellants' amended claim 1, and dependent claims 2, 7 and 8, patentably distinguish over any suggestion of the Schafer patent, and hereby request reversal of the Examiner's rejection, and allowance, of these claims.

Appellants' claim 2 further distinguishes over the Schafer patent by setting forth a locking face (22) which prevents slipping of the lead elongate component (12) passed the prescribed location. Note that the end portion of the spring member 8 is above the head 12₁ of the lead nail 10 and cannot preclude the lead nail from slipping from the insertion position illustrated in the figure of the Schafer patent.

Appellant's claim 7 further distinguishes over the Schafer patent by setting forth that the at least one catch element (18) is movable pivotally around an axis (38), with a biasing element (39) allowing movement of the at least one catch element from a feed path upon engagement with the elongate components (12).

Appellants' claim 8 further distinguishes from the Schafer patent by setting forth that the at least one catch element (18) is formed with a first end (21), a second end portion, an axis (38) intermediate the first end and the second end, and a compression spring (39) engaging the at least one catch element (18) between the axis (38) and the first end of the at least one catch element (18).

For the foregoing reasons, appellants submit that claims 2, 7 and 8 further distinguish patentably over the Schafer patent, and further support appellants' request for the reversal of the Examiner's rejection of these claims, and hereby request allowance of the claims.

Issue 5: Whether claim 14 is unpatentable, under 35 U.S.C. § 103(a), over the Olvera patent in view of U.S. Patent No. 5,810,239 (hereinafter "the Stich patent").

The provisions of 37 C.F.R. § 1.131, as set forth under Issue 2 above, apply equally to the rejections under Issue 5, but are not repeated here.

The Court of Customs and Patent Appeals has held that § 1.131 may also be used to overcome a rejection based on obviousness under 35 U.S.C. § 103, *In re Foster*, 343 F.2d 980, 145 USPQ 166 (CCPA). Appellants submit that, when the obviousness rejection is based on a combination of references, only one of the references need to be antedated to overcome the rejection.

In the attached Declaration under 37 C.F.R. § 1.131, appellants did establish invention of the subject matter of appellants' rejected claims, including claim 14 of this application, prior to September 12, 1997, which, under the provisions of 37 C.F.R. § 1.131, is the effective date of the Olvera patent. The establishment of the invention occurred in the WTO member country of Germany, subsequent to January 1, 1996.

Appellants submit the above-noted Declaration in support of the completion of their invention prior to September 12, 1997, and request that rejections of appellants' claim 14 based on the Olvera patent, in combination with the Stich patent, be withdrawn.

Issue 6: Whether claim 14 is unpatentable, under 35 U.S.C. § 103(a), over the Schafer patent in view of the Stich patent. Any

The various requirements of the sections of the MPEP, set forth under Issue 3 above, apply equally to the rejections under Issue 4, but are not repeated here.

Appellants set forth in claim 14, which depends from claims 1 or 9, that the conveying duct 16 is formed by a split sleeve 31 having a first end portion 34 adjacent the prescribed location and a second end portion 34 remote from the prescribed location. At least one resilient element 36 is arranged on the second end portion 34. The cross section of the conveying duct 16 is tapered conically substantially from the first end portion 34 to the second end portion 35, and is enlargeable against the action of the resilient element 36.

The Schafer patent has been discussed above under Issue 4, will not be repeated here. But the reasons for the distinguishment of claims 1, 2, 7 and 8 over the Schafer patent

apply to the rejection of claim 14 over the Schafer patent in view of the Stich patent.

The Stich patent shows a nailing machine which includes facility for feeding a series of nails 5 from a feed path into an upper location (as viewed in Fig. 6a) of a cylindrical nose part 3. Thereafter the nail 5 is pushed axially through the cylindrical nose part 3, which is not a split sleeve, but is a unitary cylinder through which the nail is moved. Therefore, the feed path of the head of the nail 5 does not pass through a conveying duct which is tapered conically from the upper location to a second location remote from the first location.

In addition, appellants submit that there is nothing in common between the structures of the Schafer patent and the Stich patent which would suggest or motivate one to combine the teachings of the two patents to suggest a structure as set forth in appellants' claim 14.

For the forgoing reasons, appellants submit that claim 14 patentably distinguishes over any suggestion of the Schafer patent and the Stich patent, and hereby requests the withdrawal of the rejection.

Appellants submit that, for the foregoing reasons, appellants' claims 1, 2 and 7 through 15 are allowable, and hereby request such allowance.

Appellants submit further that this application is in condition for allowance and such allowance is hereby solicited.

IX. APPENDIX

The claims involved in this appeal are as follows:

1. (Thrice amended) A conveyor for elongate components (12) designed with a head (41) and a shank (42), with a feed arrangement (7), for feeding the components in a prescribed direction, comprising a transfer arrangement (8) with a transfer region (15) into which the elongate components (12) are fed from a feed duct (11) comprising a head guiding duct (13) having a feed path for the heads (41), and a shank guiding duct (14) with the ducts (13) and (14) being in communication with a conveying duct (16) into which the components (12) can be moved from the transfer region (15), characterized by the transfer arrangement (8) which comprises:

at least one catch element (18) being located externally of the transfer region (15) and extending along, and adjacent, the head guiding duct (13) generally in the prescribed direction of the feeding of the elongate components (12);

at least one portion (21) of the at least one catch element (18) being removably extendable into and out of the feed path of the head guiding duct (13);

a biasing element (39) positioned to normally urge the at least one portion (21) of the at least one catch element (18) movably into the feed path of the head guiding duct (13) for engagement with the elongate components (12) being fed therethrough; and

the at least one catch element (18) and the at least one portion (21) thereof being mounted for deflected movement out of the feed path of the head guiding duct (13) against the normal urging of the biasing element (39) upon engagement with each of the elongate components (12) being fed through the feed path of the head guiding duct (13) to allow continued feeding of the elongate components (12) through the feed path.

2. (thrice amended) The conveyor according to claim 1, characterized in that the at least one catch element (18) has a locking face (22) facing at least partially the transfer region (15) to prevent any elongate component (12), which has passed into the transfer region (15), from slipping therefrom.

7. (twice amended) The conveyor according to claim 1, characterized in that the at least one catch element (18) is movable pivotally around an axis (38) and the biasing element (39) acts on, and allows movement of, the at least one catch element from the feed path upon engagement with the elongate components (12) passing through the feed path.

8. (twice amended) The conveyor according to claim 7, characterized in that the biasing element (39) is a compression spring, the at least one catch element (18) is formed with the at least one portion (21), which is a first end, and a second end (48), and the axis (38) is located at an intermediate portion of the at least one catch element between the first end and the second end thereof, and the compression spring is arranged to engage the at least one catch element (18) between the axis (38) and the first end of the at least one catch element.

9. (amended) The conveyor according to claim 1, characterized in that the transfer arrangement (8) comprises two relatively displaceable positioning segments (9, 10), the positioning segments (9, 10) defining a recess (24) through which a component (12) can be introduced into the conveying duct (16).

10. (amended) The conveyor according to claim 9, characterized in that the transfer arrangement (8) further comprises biasing elements (27, 28) for urging respectively the positioning segments (9, 10) together and allowing displacement thereof against the urging of the biasing elements (27, 28).

11. (amended) The conveyor according to claim 9, characterized in that each positioning segment (9,10) is pivotal round a respective pivot axis (25,26).

12. (amended) The conveyor according to claim 9, characterized in that the positioning segments (9,10) have a form substantially corresponding to the cross section of the feed duct (11).

13. (amended) The conveyor according to claim 9, characterized in that the positioning segments (9, 10) are structured to form a continuation of the feed duct (11) between at least the feed duct (11) and the transfer region (15).

14. (twice amended) The conveyor according to claims 1 or 9, characterized in that the conveying duct (16) is formed by a split sleeve (31) which comprises a first end portion (34) adjacent the transfer region (15) and a second end portion (35) remote from the transfer region (15) and at least one resilient element (36) is arranged on the second end portion (35), the cross section of the conveying duct (16) tapering conically substantially from the first end portion (34) to the second end portion (35) and being enlargeable against the action of the element (36).

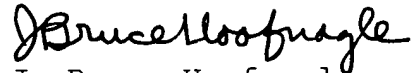
15. (amended) The conveyor according to claim 1, characterized in that the at least one portion (21) is a first end portion (21) of the at least one catch element (18), and which further comprises:

a second end portion (48) of the at least one catch element (18), which is remote from the first end portion (21);

a stop surface (49) positioned for engagement with the second end portion (48) of the at least one catch element (18); and

the biasing element (39) normally urging the second end portion (48) into engagement with the stop surface (49) to limit the distance in which the first end portion (21) is urged into the feed path of the head guiding duct (13).

Respectfully submitted,



J. Bruce Hoofnagle
Attorney for Appellants
Reg. No. 20,973